REMARKS

Claims in the case are 1-18 and 37-39 upon entry of this amendment. Claims 37-39 have been added by amendment herein. No Claims have been amended, and no Claims have been cancelled herein. Claims 19-36 were previously cancelled in an amendment dated 8 July 2003.

Basis for added Claims 37-39 is found at page 7, lines 11-19 of the specification.

Claims 1, 2, 3, 4, 6, 8, 9, 12, 15, 17 and 18 stand rejected under 35 U.S.C. §103(a) as being unpatentable over United States Patent No. 5,100,204 (**Makihara et al**). This rejection is respectfully traversed with regard to the following remarks.

Makihara et al discloses a seat back frame (e.g., 24) that includes: a rigid blow molded hollow-plate like seat frame main body (e.g., 28); and a metal mounting member (e.g., 30) that is fixed to a surface of the rigid seat frame main body. See the abstract, Figures 1 and 2, and column 5, lines 13-14 of Makihara et al. The rigid seat frame main body (e.g., 28) and the metal mounting member (e.g., 30) are fixed to each other by edge portions (e.g., 32 and 40) of notched hole portion (e.g., 38) of the metal mounting member being embedded in the plastic material of the rigid molded seat frame main body during blow molding thereof. See Figure 5, and column 6, lines 47-56 of Makihara et al.

The molded article of Applicants' claims includes a rigid support and a molded flexible member having a hollow interior (Claim 1). Makihara et al does not disclose, teach or suggest that the rigid blow molded hollow-plate like seat frame main body (e.g., 28), of the seat back frame (e.g., 24), is flexible. The rigid blow molded hollow-plate like seat frame main body and the metal mounting member together provide support for a cushion seat (e.g., 26), which covers an outer portion thereof. See Figure 1, and column 4, lines 62-68 of Makihara et al. The rigid blow molded seat frame main body (e.g., 28) forms the frame of the Makihara et al's vehicle seat, and as such must be rigid.

"The Patent and Trademark Office (PTO) must consider all claim limitations when determining patentability of an invention over the prior art." *In re Lawry*, 32 F.3d 1579, 1582 (Fed. Cir. 1994). "[W]e *must* give effect to *all* claim limitations." *In*

re Angstadt, 537 F.2d 498, 501 (CCPA 1976). (emphasis in original). "The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification." *In re Fritch*, 972 F.2d 1260, 1266 (Fed. Cir. 1992).

With regard to being a seat, and for purposes of illustrative argument, the molded article of Applicants' claims requires nothing more than the rigid support and the molded flexible member having a hollow interior to be so used as a seat. The seat back frame (e.g., 24), which is composed of rigid molded seat frame main body (e.g., 28) and metal mounting member (e.g., 30), is not disclosed or suggested by Makihara et al as being used alone as a seat. To be used as a seat, the rigid seat back frame of Makihara et al must include a cushion, e.g., cushion seat (26), which covers an outer portion of the rigid seat back frame (e.g., 24). The molded seat frame of Makihara et al is distinguishable and distinct from, and does not disclose the molded article of Applicants' claims.

On page 2 of the Office Action of 24 September 2003 it is argued, with reference to Figure 5, that Makihara et al disclose anchoring extensions. Applicants respectfully disagree, and submit that Makihara et al do not disclose or suggest the presence of anchoring extensions in their seat back frame (e.g., 24). Figure 5 is merely a cross section of the plastic material of rigid blow molded hollow-plate like seat frame main body (28) extending through notched hole portion (38). Makihara et al do not disclose or suggest the anchoring extensions of Applicants' molded article, in which the rigid support has a plurality of anchoring extensions extending into the flexible member, each of the anchoring extensions having walls, an interior chamber and at least one wall perforation in the walls, each wall perforation having edges, a portion of the flexible member extends through at least some of the wall perforations into the chamber, the edges of the wall perforations being embedded in the plastic material extending there through, thereby fixedly attaching the flexible member to the rigid support. See Applicants' Claim 17 and Figure 5 (which is a sectional representation of an anchoring extension according to Applicants' invention).

Applicants respectfully disagree with the assertion on page 3 of the Office Action (with reference to Fig. 4) that Makihara et al discloses the rigid blow molded hollow-plate like seat frame main body (e.g., 28) as including molded-in texture. Figure 4 of Makihara et al provides no representation of molded-in texture. The written specification of Makihara et al provides no disclosure of molded-in texture.

Applicants respectfully submit that the Office Action has misrepresented receiving bolts (34) of Makihara et al as further fixedly attaching the rigid blow molded hollow-plate like seat frame main body (28) to the metal mounting member (30). Receiving bolts (34) do not serve to fixedly attach rigid molded seat frame main body (28) to metal mounting member (30). Receiving bolts (34) serve only to attach the back-side hinge plate (20) to seat back frame (24), which is composed of rigid molded seat frame main body (28) to metal mounting member (30).

In light of the preceding remarks, Applicants' claims are deemed to be unobvious and patentable over Makihara et al. Reconsideration and withdrawal of this rejection is respectfully requested.

Claim 3 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Makihara et al. This rejection is respectfully traversed in light of the following remarks.

Makihara et al has been discussed previously herein, and discloses a seat back frame (e.g., 24) that includes: a rigid blow molded hollow-plate like seat frame main body (e.g., 28); and a metal mounting member (e.g., 30) that is fixed to a surface of the rigid seat frame main body. See the abstract, Figures 1 and 2, and column 5, lines 13-14 of Makihara et al. The rigid seat frame main body (e.g., 28) and the metal mounting member (e.g., 30) are fixed to each other by edge portions (e.g., 32 and 40) of notched hole portion (e.g., 38) of the metal mounting member being embedded in the plastic material of the rigid molded seat frame main body during blow molding thereof. See Figure 5, and column 6, lines 47-56 of Makihara et al.

The molded article of Applicants' claims includes a rigid support and a molded flexible member having a hollow interior (Claim 1). Makihara et al does not disclose, teach or suggest that the rigid blow molded hollow-plate like seat frame main body

(e.g., 28), of the seat back frame (e.g., 24), as being flexible. The rigid blow molded hollow-plate like seat frame main body and the metal mounting member together provide support for a cushion seat (e.g., 26), which covers an outer portion thereof. See Figure 1, and column 4, lines 62-68 of Makihara et al. The rigid blow molded seat frame main body (e.g., 28) forms the frame of the Makihara et al's vehicle seat, and as such must be rigid.

Modifying Makihara et al in the manner suggested on page 3 of the Office Action of 24 September 2003 (i.e., by substituting the metal mounting member (30) with a mounting member fabricated from reinforced thermoplastic material), would result in a seat back frame (e.g., 24) composed of rigid blow molded hollow-plate like seat frame main body (e.g., 28) and a rigid reinforced thermoplastic mounting member. Such a construct does not approximate or otherwise render obvious Applicants' claimed molded article, which includes a rigid support and a molded flexible hollow member of thermoplastic material.

In light of the preceding remarks, Applicants' claims are deemed to be unobvious and patentable over Makihara et al. Reconsideration and withdrawal of this rejection is respectfully requested.

Claims 5 and 7 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Makihara et al in view of United States Patent No. 6,120,100 (**Palazzolo et al**). In light of the following remarks, this rejection is respectfully traversed.

For purposes of clarifying the record, the first sentence of the paragraph following item 5 on page 3 of the Office Action is not related to Applicants' Claims 5 and 7, which are drawn to the flexible member further including a fabric covering or an integral film. The subject sentence appears to be perhaps a cut-and-paste error. As such, this sentence will not be substantively addressed by Applicants with regard to the rejection of Claims 5 and 7.

Makihara et al has been discussed previously herein, and discloses a seat back frame (e.g., 24) that includes: a rigid blow molded hollow-plate like seat frame main body (e.g., 28); and a metal mounting member (e.g., 30) that is fixed to a surface of the rigid seat frame main body. See the abstract, Figures 1 and 2, and

column 5, lines 13-14 of Makihara et al. The rigid seat frame main body (e.g., 28) and the metal mounting member (e.g., 30) are fixed to each other by edge portions (e.g., 32 and 40) of notched hole portion (e.g., 38) of the metal mounting member being embedded in the plastic material of the rigid molded seat frame main body during blow molding thereof. See Figure 5, and column 6, lines 47-56 of Makihara et al.

Makihara et al does not disclose, teach or suggest that the rigid blow molded hollow-plate like seat frame main body (e.g., 28), of the seat back frame (e.g., 24), as being flexible. The rigid blow molded hollow-plate like seat frame main body and the metal mounting member together provide support for a cushion seat (e.g., 26), which covers an outer portion thereof. See Figure 1, and column 4, lines 62-68 of Makihara et al. The rigid blow molded seat frame main body (e.g., 28) forms the frame of the Makihara et al's vehicle seat, and as such must be rigid. The molded article of Applicants' claims includes a rigid support and a molded flexible member having a hollow interior (Claim 1).

Palazzolo et al disclose a head rest assembly that is fabricated by means of a blow molding process (abstract). The head rest assembly of Palazzolo et al includes: a blow molded skin (e.g., 20) having a channel (e.g., 30); an insert (e.g., 22) having a peripheral edge (e.g., 23) that is disposed within the channel (e.g., 30); and a foam cushion (e.g., 26) within the blow molded skin (e.g., 20). See Figures 4 and 5, and column 2, line 49 through column 3, line 8 of Palazzolo et al.

Makihara et al disclose a vehicle seat that includes a seat cushion (e.g., 26) which covers an outer portion of a rigid seat back frame assembly (e.g., 24), which includes a rigid blow molded hollow-plate like seat frame main body (e.g., 28); and a metal mounting member (e.g., 30). Makihara et al disclose the blow mold preparation of a rigid seat frame, and do not disclose or suggest the blow mold preparation of a foam cushion. Palazzolo et al disclose a head rest that includes an insert (e.g., 22) which is secured to the skin (e.g., 20) of a foam cushion (e.g., 26) during blow molding. Palazzolo et al do not disclose or suggest the blow mold preparation of a rigid seat frame. As such, neither Makihara et al nor Palazzolo et al provide the requisite disclosure that would motivate a skilled artisan to combine or

otherwise modify their disclosures in an attempt to arrive at Applicants' presently claimed molded article.

Even if Makihara et al and Palazzolo et al were combined in the manner suggested in the Office Action, Applicants' claimed molded article would not result from such combination. Makihara et al and Palazzolo et al either alone or in combination do not disclose, teach or suggest a molded article that includes a rigid support having a plurality of perforations having edges, and a molded hollow flexible member of thermoplastic material that is fixedly attached to the rigid support by means of portions of the flexible member extending through and embedding the edges of the perforations of the rigid support.

In light of the above remarks, Applicants' claims are deemed to be unobvious and patentable over Makihara et al in view of Palazzolo et al. Reconsideration and withdrawal of this rejection is respectfully requested.

Claims 10 and 11 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Makihara et al in view of United States Patent No. 5,711,575 (**Hand et al**). This rejection is respectfully traversed in light of the following remarks. Makihara et al has been discussed previously herein. Hand et al disclose an inflatable lumbar support system that includes a plurality of thermoplastic layers, that form at least two laterally spaced bladders (abstract). The lumbar support system of Hand et al is reversibly attached to a chair by means of mounting hooks (e.g., 180). See the abstract, Figure 12, and column 10, lines 54-59 of Hand et al. The lumbar support system of Hand et al may be inflated and deflated by a person sitting in the chair, e.g., by means of pump device 197, tube 196 and extension tube 188 (Figure 12, and column 9, lines 5-29).

Makihara et al disclose a rigid blow molded seat frame main body (e.g., 28) that is fixedly and irreversibly attached to a metal mounting member (e.g., 30). Hand et al disclose a lumbar support system that is reversibly attached to a chair by means of mounting hooks. Makihara et al provide no disclosure or suggestion with regard to reversibly attaching the rigid blow molded seat frame main body (e.g., 28) that is fixedly and irreversibly attached to a metal mounting member (e.g., 30) by means of mounting hooks. Hand et al provide no disclosure or suggestion as to

irreversibly and fixedly attaching their lumbar support system to a chair by means of a portion of the plastic of the lumbar support extending through and embedding the edges of perforations in the chair. As such, neither Makihara et al nor Hand et al provide the requisite disclosure that would motivate one of ordinary skill in the art to combine or otherwise modify their disclosures to arrive at Applicants' claimed molded article.

In addition, the blow molded seat frame main body (e.g., 28) of Makihara et al's seat back frame assembly (e.g., 24) is rigid, and as such is neither inflatable nor deflatable. Accordingly, a skilled artisan would not consider including a means of reversibly inflating and deflating the rigid blow molded seat frame main body (e.g., 28) of Makihara et al's seat back frame assembly (e.g., 24). As such, neither Makihara et al nor Hand et al provide the requisite disclosure that would motivate one of ordinary skill in the art to combine or otherwise modify their disclosures to arrive at Applicants' claimed molded article.

Even if Makihara et al and Hand et al were combined in the manner suggested in the Office Action, Applicants' claimed molded article would not result therefrom. The blow molded seat frame main body (e.g., 28) of Makihara et al's seat back frame assembly (e.g., 24) is rigid. The molded hollow member of thermoplastic material of Applicants' claimed molded article is flexible. The rejection appears to make impermissible use of hindsight reconstruction in picking, choosing, combining and modifying the disclosures of the cited references in an attempt to arrive at Applicants' claimed molded article.

In light of the preceding remarks, Applicants' claims are deemed to be unobvious and patentable over Makihara et al in view of Hand et al. Reconsideration and withdrawal of this rejection is respectfully requested.

Claims 13, 14 and 16 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Makihara et al in view of United States Patent No. 5,522,645 (**Dahlbacka**). This rejection is respectfully traversed in light of the following remarks.

Makihara et al has been discussed previously herein. Dahlbacka discloses a seat which includes: a shell that includes a channel therein; a cushion that includes

a ridge that extends into the channel of the shell; and mechanical fasteners that extend through the channel and the ridge of the cushion therein, so as to retain the cushion on the shell. See the abstract of Dahlbacka. More particularly, the cushion (14) of Dahlbacka's seat has a ridge (20) that extends into the channel (22) of the shell (12). The ridge (20) is mechanically held within channel (22) by means of connectors, i.e., brads, (18) that are driven through the outer and inner walls of the channel (22) and through the ridge (20) pressed therein. See Figure 6, and column 6, lines 29-48 of Dahlbacka.

As discussed previously herein, the rigid seat frame main body (e.g., 28) and the metal mounting member (e.g., 30), of Makihara et al's seat back frame assembly (e.g., 24), are irreversibly fixed to each other by edge portions (e.g., 32 and 40) of notched hole portion (e.g., 38) of the metal mounting member being embedded in the plastic material of the rigid molded seat frame main body during blow molding thereof. Makihara et al's seat back frame assembly (e.g., 24) (which includes the rigid blow molded hollow-plate like seat frame main body and the metal mounting member) provides support for a cushion seat (e.g., 26), which covers an outer portion thereof. The backrest portion (12B) and the seat portion (12A) of Dahlbacka's shell (12) alone provide support for a cushion (14). Makihara et al do not disclose or suggest a single component seat back frame for providing support to a cushion. Dahlbacka do not disclose or suggest a multi-component shell for providing support to a cushion. As such, neither Makihara et al nor Dahlbacka provide the requisite disclosure that would motivate a skilled artisan to combine or otherwise modify the disclosures of Makihara et al and Dahlbacka.

Makihara et al and Dahlbacka either alone or in combination do not disclose, teach or suggest Applicants' claimed molded article, which includes a molded hollow flexible member of thermoplastic material that is fixedly attached to a rigid support by means of plastic material of the flexible member extending through perforations in the rigid support, wherein the edges of the perforations are embedded in the plastic material extending there-through.

In light of the preceding remarks, Applicants' claims are deemed to be unobvious and patentable over Makihara et al in view of Dahlbacka. Reconsideration and withdrawal of this rejection is respectfully requested.

In light of the amendments herein and the preceding remarks, Applicants' presently pending claims are deemed to define an invention that is unanticipated, unovbious and hence, patentable. Reconsideration of the rejections and allowance of all of the presently pending claims is respectfully requested.

Respectfully submitted,

By _____
James R. Franks
Agent for Applicants
Reg. No. 42,552

Bayer Polymers LLC
100 Bayer Road
Pittsburgh, Pennsylvania 15205-9741
(412) 777-3808
FACSIMILE PHONE NUMBER:
(412) 777-3902

/jme/JRF/JF0247